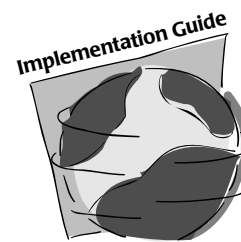


Introduction



Implementing GLOBE in Your School

Obtaining Instruments

Each of the investigations requires use of accurate, reliable, and calibrated instruments that meet the specifications developed by the GLOBE scientists to ensure consistent and accurate measurements for use by the international environmental science community. The instrument specifications are contained in the *Toolkit*.

You have four choices:

1. Purchase all or some of the instruments.
 - Purchase individual instruments from several suppliers.
 - Purchase the instruments from one supplier as a kit.
2. Use your own instruments.

If you already have instruments that meet GLOBE specifications in your school, you may use them. You must be sure, however, that they meet the accuracy and calibration requirements.
3. Make some of your instruments.

Following directions given in this *Teacher's Guide* and at the teacher training workshops, you will be able to construct some of the instruments.
4. Borrow instruments or share some of the instruments with other schools.

You may be able to borrow instruments that are needed infrequently from another local school or share one instrument among two or more GLOBE schools. In the case of the GPS receiver, it is available on loan from GLOBE or through your GLOBE Country Coordinator.

Training and Implementation

Every teacher who takes responsibility for the GLOBE measurements must have attended one GLOBE sanctioned workshop. Teachers who have received GLOBE training must undertake the responsibility of making sure that the others in

their school receive correct training. If you have attended a GLOBE workshop and are comfortable implementing new GLOBE measurement protocols, then you are encouraged to do so even though your training may not have covered them. If you are uncomfortable with the new protocols, you can obtain assistance from the GLOBE Help Desk or attend another GLOBE training workshop.

Establish Learning Communities

School Learning Community

An effective, interesting, and exciting way to implement GLOBE in your school is to involve many teachers. If you can share the work with colleagues, it will make it easier and more fun. More importantly, it is helpful for you to have colleagues with whom you can share ideas, brainstorm, and plan. Research and experience have shown over and over again that innovative programs such as GLOBE have a better chance of success if they are undertaken by a team of mutually-supportive teachers than if tackled alone.

One strategy for building a learning community in your school is the development of a school implementation plan which details a division of labor among teachers at the school for the implementation of the various GLOBE topic areas – atmosphere, hydrology, soil, and land cover/biology. The plan could identify the most appropriate locations in the school curricula for integrating each of the GLOBE areas. The plan also could have a section on training and involving additional colleagues. Schools with a single GLOBE trained teacher might choose to get additional colleagues involved in the implementation of GLOBE at their school. This can be done by having the initially trained GLOBE teacher train others at the school or the other teachers can attend any one of a number of GLOBE workshops. The plan might also describe how equipment and computer facilities will be obtained and factored into the instructional plan.



A timetable for all major activities is desirable. One strategy might be to develop a GLOBE implementation plan as part of a classroom activity involving students. They could come up with ideas for addressing issues such as the placement of the weather station, identification of classes or subjects for inclusion, etc.

In order to provide an identity for your school learning community and for GLOBE activities in your school, you may want to establish a GLOBE headquarters in some prominent location, perhaps in the library or resource center. Here you can display GLOBE posters, have a collection of books about planet Earth, display student work, and perhaps have a computer set up with an Internet connection ready to log onto GLOBE.

In addition, you may want to place posters and other materials in a prominent place near the school office or entrance, identifying your school as a participant in the GLOBE Program. Students may create ongoing displays of the data they are collecting. Photos of students at the study and sample sites making measurements and maps locating these sites will inform viewers of the scope of your work.

The school-based plan can be extended to the school district, thereby developing a strategy for the implementation of GLOBE at various schools linking activities from beginning to intermediate and advanced levels.

Neighborhood Learning Community

Another area where you might build a learning community is in your neighborhood. There are many people and organizations which may be interested in your GLOBE activities. Some of those people or organizations might be recruited to assist you with a variety of activities. For example, service clubs such as Rotary, business and industry or other organizations, may be willing to provide support for equipment purchases, research activities or presentations.

Community volunteers, including parents, may be able to help with a variety of GLOBE related tasks or activities. It is important to cultivate an ongoing relationship with key members of the community. Let them know about your successes and plans. Publicize events and invite them to

attend. If people provide money or services, then be sure to thank them by letter and acknowledgment in public forums. Areas where volunteers may be able to assist include:

- provide transportation for students to and from the study and sample sites
- help collect data on weekends or during school vacations
- help students use the GLOBE World Wide Web resources from home computers
- accompany the class on field trips to the sites
- help younger students make the daily measurements at the weather station
- help edit and publish a GLOBE newsletter to be sent home providing updates on what the students are doing in their GLOBE work
- help set up a GLOBE exhibit in a public area of the school or the community
- help prepare press releases about GLOBE for local newspapers.

Geographically Distributed Research Learning Community

It is also possible to establish geographically distributed research teams which can become a wider learning community. Schools in various parts of a country or the world can collaborate on research activities. These activities can compare various data sets or explore any number of phenomena. Some may choose to collaborate on learning activities. In order to establish a geographically distributed learning community, it is important to first establish the task or function you wish to collaborate on then decide on the geographic scope. Communication vehicles can include GLOBEMail or other methods such as regular post. Your research community can be expanded by inviting GLOBE scientists or other researchers to participate as mentors and provide support for your school to school investigation. Once you have completed your investigation it is important to think about how you might communicate the results to others. You might consider doing presentations at your school, school board meeting, community forum or submit your work in the form of a paper to a journal.